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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Nathan R. Brown

Attorney Docket No.: 500200.05

Patent No. : US 6,852,017 B2

Serial No. : 09/910,638

Issue Date: February 8, 2005

Filed

: July 20, 2001

Title

: METHOD AND APPARATUS FOR CHEMICAL-MECHANICAL PLANARIZATION OF MICROELECTRONIC SUBSTRATES WITH A CARRIER AND MEMBRANE

REQUEST FOR CERTIFICATE OF CORRECTION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

A Certificate of Correction under 35 U.S.C. § 254 is respectfully requested for the above-identified patent in order to correct Patent and Trademark Office errors made during the printing of the patent. The changes in the patent needed to correct the errors are as follows:

Column, Line	Reads	Should Read
Item (56), U.S.	[Omitted	6,290,572 B1 9/2001 Hofmann451/5
Patent Documents	references]	5,769,699 6/1998 Yu451/528
		6,135,858 10/2000 Takahashi451/41
Column 3, Line 57	"the thicket	portion" the thicker portion
Column 8, Line 66	[Omitted	5. A method for removing material from a

claims

microelectronic substrate, comprising:

providing a substrate holder that carries the microelectronic substrate and at least one membrane having a first membrane portion and a second membrane portion, the at least one membrane disposed between the substrate holder and the microelectronic substrate;

engaging the microelectronic substrate with a planarizing medium;

moving at least one of a first part of the microelectronic substrate and the planarizing medium relative to the other at a first rate;

moving at least one of a second part of the microelectronic substrate and the planarizing medium relative to the other at a second rate less than the first rate; and

removing material from the first and second parts of the microelectronic substrate at approximately equal rates by biasing the first part of the microelectronic substrate against the planarizing medium with the first membrane portion having a first thickness and biasing the second part of the microelectronic substrate against the planarizing medium with the second membrane portion having a second thickness greater than the first thickness.

- 6. The method of claim 5 wherein engaging the microelectronic substrate with the planarizing medium includes engaging the microelectronic substrate with a polishing pad.
- 7. The method of claim 5 wherein moving at least one of the first part of the microelectronic substrate and the planarizing medium includes moving at least one of a first annular part of the microelectronic substrate and the planarizing medium, further wherein moving at least one of the second part of the

microelectronic substrate and the planarizing medium includes moving at least one of the planarizing medium and a second annular part of the microelectronic substrate positioned radially inwardly from the first annular part of the microelectronic substrate.

- 8. The method of claim 5 wherein the at least one membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.
- 9. The method of claim 5 wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate.--

The above errors for which correction is requested under 35 U.S.C. § 254 were made in the printing of the patent. The errors are considered sufficiently important to justify the processing of a Certificate of Correction under 35 U.S.C. § 254. A Form PTO-1050, in duplicate, is enclosed herewith.

Favorable consideration of this Request is respectfully requested.

Respectfully submitted,

Date: Oct. 10, 2006

LCL

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Attorney for Applicant(s)

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Enclosures:

Postcard

Form PTO-1050 (+ copy)

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UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO.

US 6,852,017 B2

DATED

February 8, 2005

INVENTOR(S)

Nathan R. Brown

It is certified that errors appear in the above identified patent and that said Letters Patent is hereby corrected as shown below:

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 Item (56), U.S. Patent
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 Documents
 Hofmann......451/5

 5,769,699 6/1998
 Yu...........451/528

 6,135,858 10/2000
 Takahashi............451/41-

Column 3, Line 57

"the thicket portion"

--the thicker portion--

Column 8, Line 66

[Omitted

claims]

--5. A method for removing material from a microelectronic substrate, comprising: providing a substrate holder that carries the microelectronic substrate and at least one membrane having a first membrane portion and a second membrane portion, the at least one membrane disposed between the substrate holder and the microelectronic substrate;

engaging the microelectronic substrate with a planarizing medium;

moving at least one of a first part of the microelectronic substrate and the planarizing medium relative to the other at a first rate;

moving at least one of a second part of the microelectronic substrate and the planarizing medium relative to the other at a second rate less than the first rate; and removing material from the first and second parts of the microelectronic

1 8 200

substrate at approximately equal rates by biasing the first part of the microelectronic substrate against the planarizing medium with the first membrane portion having a first thickness and biasing the second part of the microelectronic substrate against the planarizing medium with the second membrane portion having a second thickness greater than the first thickness.

- 6. The method of claim 5 wherein engaging the microelectronic substrate with the planarizing medium includes engaging the microelectronic substrate with a polishing pad.
- 7. The method of claim 5 wherein moving at least one of the first part of the microelectronic substrate and the planarizing medium includes moving at least one of a first annular part of the microelectronic substrate and the planarizing medium, further wherein moving at least one of the second part of the microelectronic substrate and the planarizing medium includes moving at least one of the planarizing medium and a second annular part of the microelectronic substrate positioned radially inwardly from the first annular part of the microelectronic substrate.
- 8. The method of claim 5 wherein the at least one membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the OCT 1 8 2006 membrane.
- 9. The method of claim 5 wherein biasing

the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate.--

MAILING ADDRESS OF SENDER:

DORSEY & WHITNEY LLP 1420 Fifth Avenue, Suite 3400 Seattle, Washington 98101

FORM PTO-1050 (REV. 3-82)

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Patent No. <u>US 6,852,017 B2</u>

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Column 8, Line 66	[Omitted	5. A method for removing material from
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		portion and a second membrane portion,
		the at least one membrane disposed
		between the substrate holder and the
		microelectronic substrate;
		engaging the microelectronic substrate
		with a planarizing medium;
		moving at least one of a first part of the
		microelectronic substrate and the
		planarizing medium relative to the other at
•		a first rate;
		moving at least one of a second part of the
		microelectronic substrate and the
		planarizing medium relative to the other at
		a second rate less than the first rate; and OCT 18

removing material from the first and

second parts of the microelectronic

substrate at approximately equal rates by biasing the first part of the microelectronic substrate against the planarizing medium with the first membrane portion having a first thickness and biasing the second part of the microelectronic substrate against the planarizing medium with the second membrane portion having a second thickness greater than the first thickness.

- 6. The method of claim 5 wherein engaging the microelectronic substrate with the planarizing medium includes engaging the microelectronic substrate with a polishing pad.
- 7. The method of claim 5 wherein moving at least one of the first part of the microelectronic substrate and the planarizing medium includes moving at least one of a first annular part of the microelectronic substrate and the planarizing medium, further wherein moving at least one of the second part of the microelectronic substrate and the planarizing medium includes moving at least one of the planarizing medium and a second annular part of the microelectronic substrate positioned radially inwardly from the first annular part of the microelectronic substrate.
- 8. The method of claim 5 wherein the at least one membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.
- 9. The method of claim 5 wherein biasing

the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate.--

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FORM PTO-1050 (REV. 3-82)

Patent No. <u>US 6,852,017 B2</u>

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